#### **ATTACHMENT C**

#### **NSC APPLICATIONS**

The NSC hosts the following applications:

#### NASA Safety Center Website

The NSC website provides services for the SMA Community, the NASA Management Team and NASA employees that foster Mission Success through Technical Excellence for the SMA Community, Knowledge Capture and Dissemination, Coordinated Audits and Assessments, and Mishap Investigation Support. The NSC website utilizes an Ektron Content Management System, ColdFusion 9 Standard, ASP.Net, PHP 5.2.12, SQL Server 2005 32-bit and SQL Server 2008 R2 64-bit.

#### NSC Knowledge Now

Knowledge Now is a web-based system designed to support virtual collaboration through Communities of Practice (CoP). The Government –Off-The Shelf (GOTS) tool developed by Triune Group is being implemented to replace the legacy Ramius Community Zero product.

# Safety and Mission Assurance Requirements Tracking System

SMARTS is an internet-based information system designed to collect all SMA policy and procedural requirements at the Agency and Center levels and from appropriate sources external to NASA; support research into SMA requirements by providing a means to filter, collect, search, and sort requirements into virtual documents to meet specific needs; support the data associated with the verification of compliance to SMA requirements; support maintenance and development of new SMA policy and implementation documents/requirements; and trace links of SMA requirements to improve effectiveness and help limit duplication of requirements. SMARTS is based on SQL Server database and ColdFusion.

# Flight Test Safety Database Portal

For years the International Flight Test community has had a need for easy access to flight test maneuver descriptions, test hazards, and hazard mitigation techniques. This portal is a step in that direction, and builds on similar efforts by the Flight Test Safety Committee, the Society of Experimental Test Pilots, and the Society of Flight Test Engineers, and other professional organizations. Our objective is to identify and document hazards and mitigations associated with flight-testing and provide a compilation of the flight test industry's corporate knowledge regarding flight test safety risk assessment. Where applicable, the database cross-references FAR guidance from Parts 23, 25 and other flight-test-related sections. It also discusses typical industry risk levels assigned to specific types of tests. The NSC Hosts and develops the FTSDB in partnership with the FAA and NASA Dryden Flight Research Center.

# STEP Handbook

The STEP Handbook provides guidance to STEP participants throughout the entire training process. The application includes Level 1-4 discipline products; My STEP, which enables participants to login for individualized information, documents and forms as well as help and frequently asked questions. The STEP handbook was built using .NET and SQL Server.

# Software Safety Litmus Test (SSLT)

The Software Safety Litmus Test (SSLT) application is a web-based application that allows a user to electronically submit a Software Safety Litmus Test to determine software safety-criticality, which is explained and defined in the NASA Software Assurance Standard (NASA-STD-8739.8) and the NASA Software Safety Standard (NASA-STD-8719.13B). SSLT is a web-based application based on PHP and MySQL. SSLT guides users through the defined criteria and provides end results of test execution based on user provided input. Results are stored for future reference and reporting. SSLT also allows the user to create revisions based upon previously stored results.

# NCAS Contract Management System (NCAS CMS)

The NCAS COTR and CO use the NCAS CMS to Manage the NCAS contract. The follow on A3 contract will also utilize this application. The NSC hosts this application that is maintained by the contractor.

# Process Based Mission Assurance (PBMA) Enhanced Security Workgroups

The legacy Enhanced Security Work Groups (ESWGs) provided the core functionality of the Process Based Mission Assurance (PBMA) Knowledge Management System. These ESWGs provide multi-dimensional, collaborative functionality to support the NASA Safety and Mission Assurance community, and individual program/project teams as well as formal and informal groups of subject matter experts. This application is based on the Community Zero product by Ramius. Approximately 800 workgroups and 18,000 users will be migrated from ESWG to the NSC Knowledge Now.

#### Process Based Mission Assurance (PBMA) Knowledge Management System

This legacy system provided quick and easy access to critical Safety & Mission Data to support program managers and S&MA professionals across all NASA programs and projects. Enabled mission success knowledge management through key knowledge access (the right information, in the right place, at the right time), knowledge capture (both explicit (documented) and tacit (corporate/tribal)), knowledge sharing & reuse, and work groups and collaboration.

#### Incident Reporting Information System (IRIS)

IRIS provides mishap, close call and hazard data collection satisfying NPR 8621.1and federal requirements for 29 CFR 1904. IRIS is an information reporting system that reports injury and illness for OSHA people, safety incidents such as mishaps, close calls, and hazards. It also tracks damages to financial, property, dollars lost and\or needed for repair. Technical Issues for

NESC are reported to the system. It interfaces with the FPPS for all NASA civil servant employees and X500 for all contractors, which help track employees. The system contains the Integrated Corrective Action System (ICAS) which is an Corrective Action module that tracks the status of the incidents and the Investigation Module which tracks the findings of the investigation report. IRIS collects data from multiple sources. IRIS is a COTS tool provided under a contract with Ex3 Corporation.